Test Project

IT Network Systems Administration

Module B –Network Challenge

(Cisco Packet Tracer)

Submitted by:
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Introduction to Test Project

This Test Project proposal consists of the following document/file:

- LKSN2019_ITNETWORK_MODUL_B.pdf
- LKSN2019_ITNETWORK_MODUL_B.pka

Introduction

The competition has a fixed start and finish time. You must decide how to best divide your time.

Please carefully read the following instructions!

When the competition time ends, please leave your station in a running state.

Password for all device and service: **Pa$$worD**

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ENGINEERING NOTES

IP ADDRESS TABLE

DEVICE	INTERFACE	IP AADDRESS	SUBNET MASK
FW-01	G1/1 - inside	192.168.254.2	255.255.255.252
	G1/2 - inside_1	192.168.254.6	255.255.255.252
	G1/3 - outside	172.16.100.100	255.255.255.0
DSW-01	G1/0/1	192.168.254.1	255.255.255.252
DSW-02	G1/0/2	192.168.254.5	255.255.255.252
MOW	G0/0	172.16.100.1	255.255.255.0
	G0/1	100.97.24.2	255.255.255.252
	S0/1/0	10.1.0.1	255.255.255.252
	S0/1/1	10.1.1.1	255.255.255.252
RTK	G0/0.100	100.97.24.1	255.255.255.252
	G0/0.200	200.88.45.254	255.255.255.0
	G0/0.300	30.27.34.55	255.255.255.192
	G0/0.400	40.10.0.24	255.255.255.128
	G0/1	1.1.1.254	255.255.255.0
	G0/2	10.10.10.1	255.255.255.0
KVX	G0/0/0	200.88.45.2	255.255.255.0
	G0/0/1	192.168.100.254	255.255.255.0
	S0/1/0	10.1.0.2	255.255.255.252
	S0/1/1	10.1.1.2	255.255.255.252
TOF	G1/2 – outside	30.27.34.1	255.255.255.192
	G1/1 – inside	10.10.10.1	255.255.255.0
YKS	G0/0/0	40.10.0.126	255.255.255.128
	G0/0/1	10.200.200.1	255.255.255.0

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IP ADDRESS ON HQ SITE:

VLAN

Vlan ID	Vlan Name	IP Network
10	HQ	192.168.10.0/24
20	Voice	192.168.20.0/24
30	MGMT	192.168.30.0/24

DSW-01

- Vlan10 :192.168.10.254
- Vlan20 :192.168.20.254

DSW-02

- Vlan10 :192.168.10.253
- Vlan20 :192.168.20.253
- DHCP Service for VLAN 10 and VLAN 20

KGB

- DHCP (Vlan 10)

KREMLIN

- DHCP (Vlan 20)

DNS

- DNS available at IP 1.1.1.1
    - wsc2019.ru resolve to 1.1.1.1

VTP

- Version 2
- Domain : wsc2019.ru
- VTP-Server : DSW-01
- VTP-Client : DSW-02, ASW-01

VLAN

- VLAN 10: HQ
- VLAN 20: VOICE
- VLAN 30: MGMT

SPANNING TREE

- Mode: Rapid-pvst
- VLAN 10-30:
    - Primary Root : DSW-01
    - Secondary Root: DSW-02

PORT-CHANNEL DSW-01 and DSW-02

- Channel-group 1
- Protocol: LaCP

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INTERNAL ROUTING

HQ Site

- EIGRP AS 2019
  - 192.168.254.0/30
  - 192.168.254.4/30
  - 172.16.100.0/24
  - VLAN10
  - VLAN20
  - VLAN30

RT-KVX and RT-MOW

- OSPF AS 3000
  - Area 0 10.0.1.0/30 10.1.1.0/30
  - Area 1 192.168.100.0/24
- Redistribute eigrp into ospf

EXTERNAL ROUTING

- Advertise only IP Public RTK to all router.
  - BGP 65001 > YKS
  - BGP 65002 > MOW
  - BGP 65003 > KVX
  - BGP 65004 > RTK

CME at MOW

Hostname	Ext. Number
KGB	1001
KREMLIN	1002
YURI	2001

Other Information

- ASA ACL allow ip any any
- MOW-KVX Serial 0/1/0 encap PPP with authentication PAP
- ASA Static default route
- NAT Access at MOW, YKS, and TOF. All Laptop and Servers could ping 1.1.1.1 and access internet (http://wsc2019.ru)

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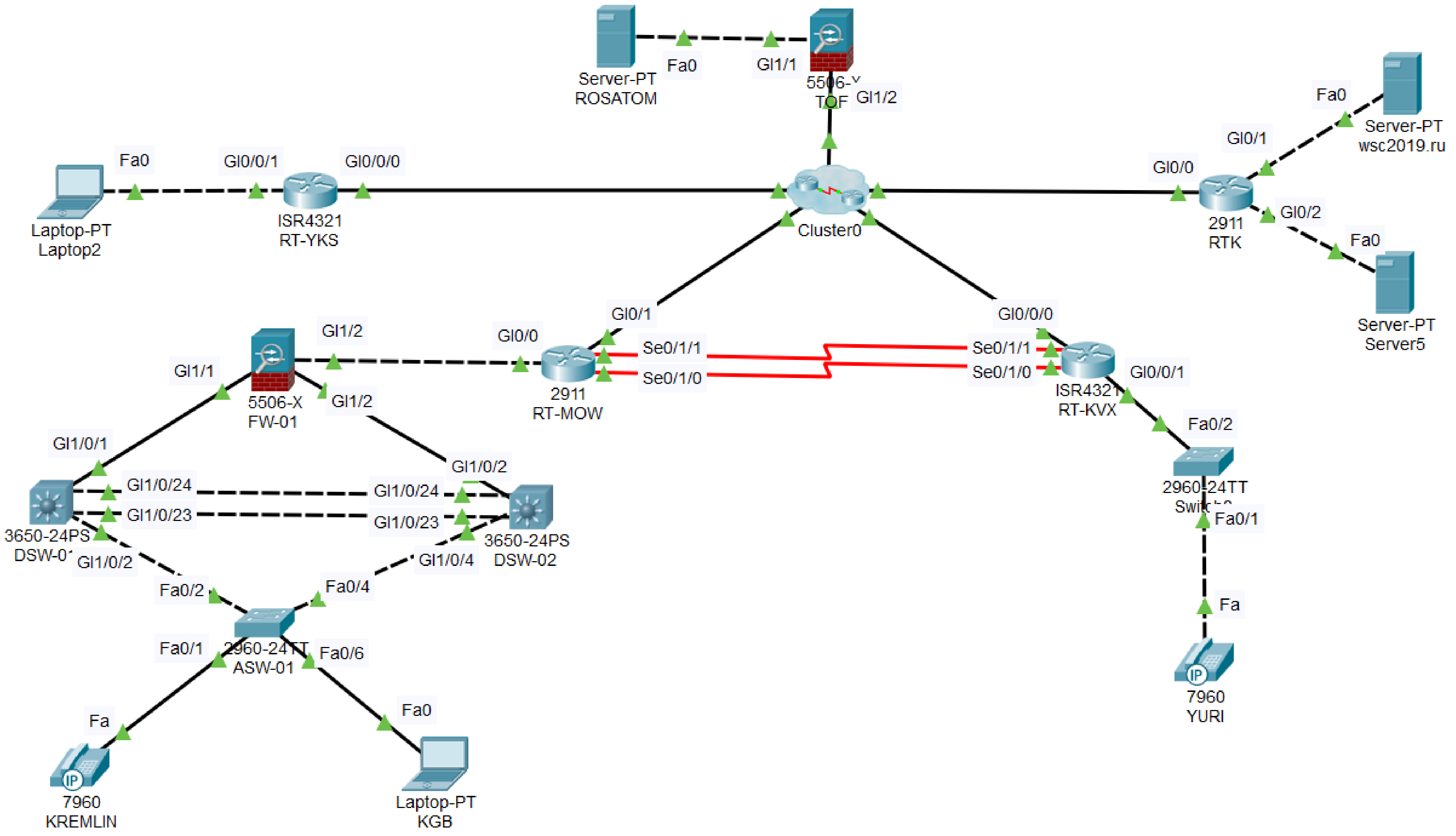
NETWORK DIAGRAM



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